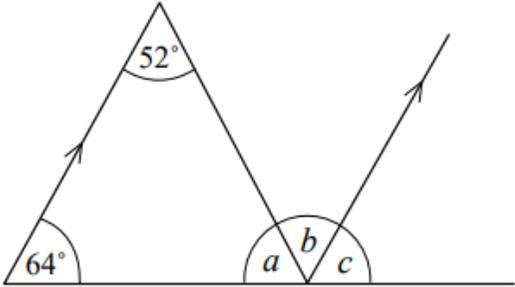
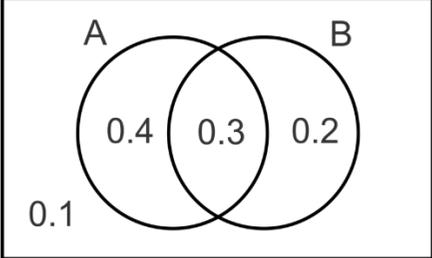
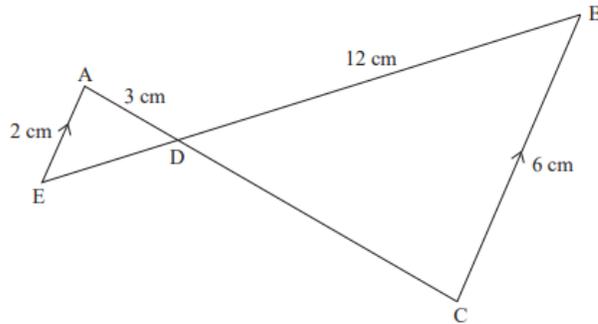


Calculator Higher - GCSE Revision

<p>When $a = -3$, find the value of $5a^2 - 2a$.</p>	<p>Jo and Dan share sweets in the ratio 10 : 4. Jo has 18 more sweets than Dan. How many sweets does Dan have?</p>	<p>Increase £43 by 16%.</p>	<p>A circle has area 40cm^2. Find its diameter. Round your answer to two decimal places.</p>
<p>Work out the size of angles a, b and c.</p>		<p>Given that £1 = \$1.30, how much is \$200 worth in pounds?</p>	 <p>a) Find $P(A \cup B)$. b) Find $P(A')$.</p>
<p>Use your calculator to find the cube root of 110. Round your answer to 1 decimal place.</p>	<p>Find the midpoint of $(-3, 5)$ and $(7, 10)$.</p>	<p>The cost of a jacket increases by £5. The new price is £85. Find the percentage increase.</p>	<p>$a = 13$ correct to the nearest integer. $b = 70$ correct to the nearest ten. Find the upper bound of $\frac{b}{a}$.</p>

Find the length CD.



If $a : b = 8 : 7$
and $a : c = 10 : 7$
write the ratio $b : c$ in
simplest form.

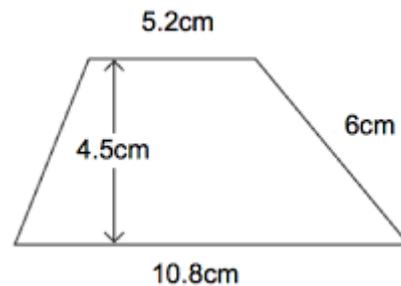
Are the following
numbers prime?

a) 51

b) 127

I bought a scarf in the sale.
It was marked as 30% off. It
cost me £10.50. What was
the original price?

Work out the area of the
trapezium.

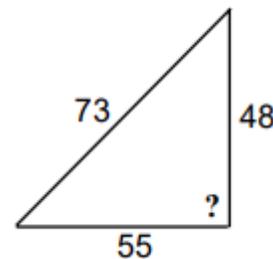


Use your calculator
to work out
 $6.12 \times 10^7 \div 4.8 \times 10^2$.
Answer in standard form.

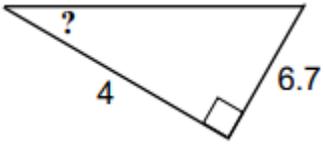
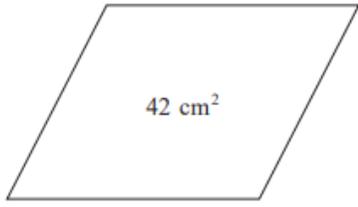
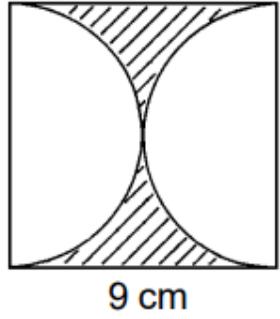
Find the gradient of the
line joining $(-3, 5)$ and
 $(7, 10)$.

What's the exterior angle of
a regular decagon?

Is this triangle right angled?

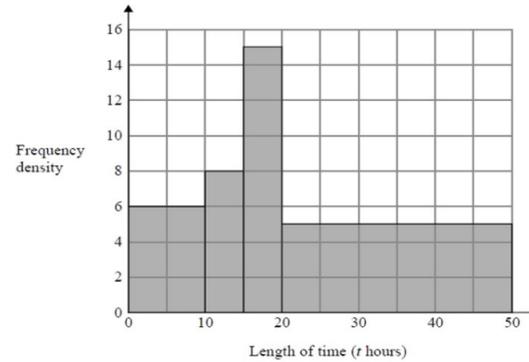


y is inversely proportional
to x . Given that $y = 12$
when $x = 4$, find the value
of y when $x = 16$.

<p>I buy a car for £15,670. The car depreciates at a rate of 23% per annum.</p> <p>a) How much is the car worth in 5 years?</p> <p>b) How many years until the car is worth less than £1000?</p>	<p>Find the marked angle.</p> 	<p>I have five red socks and six green socks in a drawer. I pick two socks at random. What's the probability both socks are the same colour?</p>	<p>Find two consecutive numbers which, when multiplied together, make 462.</p>
<p>An equilateral triangle with side length 24cm has the same perimeter as a square. What's the area of the square?</p>	<p>This parallelogram has an area of 42cm^2.</p>  <p>The parallelogram is enlarged with a scale factor of 5. Calculate the area of the enlarged parallelogram.</p>	<p>What's longer, 1500 metres or 1 mile?</p> <p>Use the conversion $8\text{ km} = 5\text{ miles}$.</p>	<p>The picture shows a square and two semicircles. Find the shaded area.</p> 

Solve $x^2 + 8x - 3 = 0$.
Give your answers to 2 decimal places.

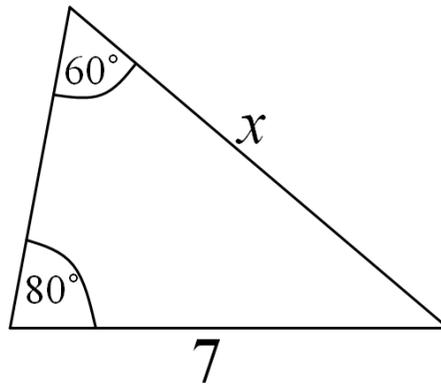
The histogram shows the amount of time a group of people spent watching TV last week. Estimate the percentage of people who watched TV for more than 40 hours.



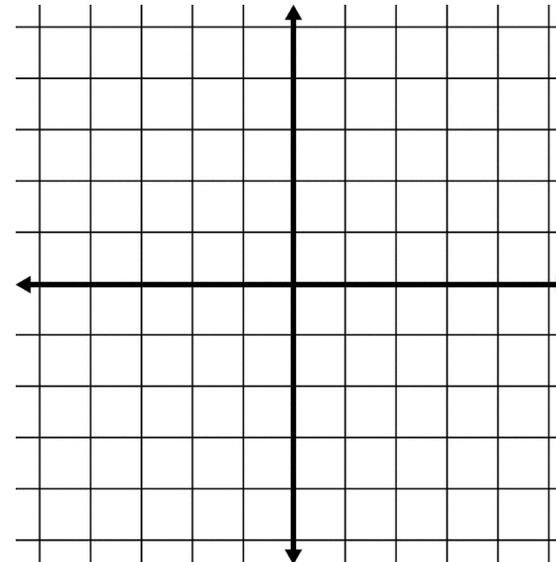
Find the coordinates of the turning point of the graph $y = 10x - x^2$.

In a sample, 6 earthworms measure between 40mm and 60mm. 10 earthworms measure between 60mm and 120mm. Estimate the mean length.

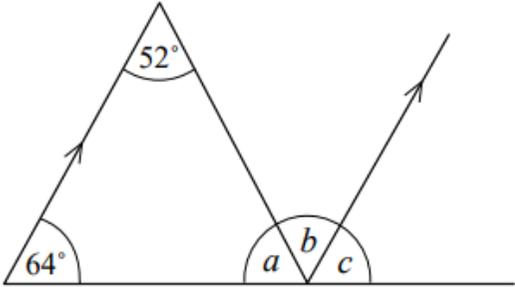
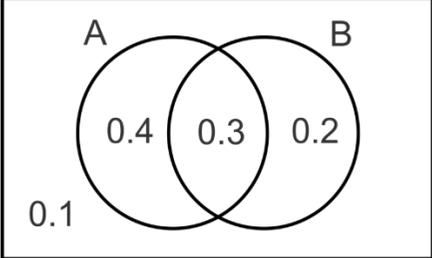
Work out x .



Show, by shading on the grid below, the region defined by $y \leq x + 2$. Label your region **R**.

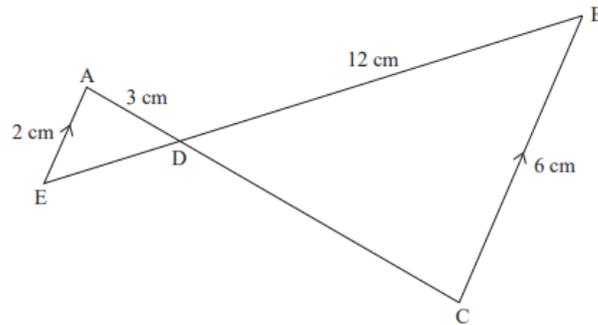


Calculator Higher - GCSE Revision - ANSWERS

<p>When $a = -3$, find the value of $5a^2 - 2a$.</p> <p>51</p>	<p>Jo and Dan share sweets in the ratio 10 : 4. Jo has 18 sweets more than Dan. How many sweets does Dan have?</p> <p>12</p>	<p>Increase £43 by 16%.</p> <p>£49.88</p>	<p>A circle has area 40cm^2. Find its diameter. Round your answer to two decimal places.</p> <p>7.14cm</p>
<p>Work out the size of angles a, b and c.</p> <p>$a = 64^\circ$ $b = 52^\circ$ $c = 64^\circ$</p>		<p>Given that £1 = \$1.30, how much is \$200 worth in pounds?</p> <p>£153.85</p>	 <p>a) Find $P(A \cup B)$. 0.9 b) Find $P(A')$. 0.3</p>
<p>Use your calculator to find the cube root of 110. Round your answer to 1 decimal place.</p> <p>4.8</p>	<p>Find the midpoint of $(-3, 5)$ and $(7, 10)$.</p> <p>(2, 7.5)</p>	<p>The cost of a jacket increases by £5. The new price is £85. Find the percentage increase.</p> <p>6.25%</p>	<p>$a = 13$ correct to the nearest integer. $b = 70$ correct to the nearest ten.</p> <p>Find the upper bound of $\frac{b}{a}$.</p> <p>6</p>

Find the length CD.

9cm



If $a : b = 8 : 7$
and $a : c = 10 : 7$
write the ratio $b : c$ in
simplest form.

5 : 4

Are the following
numbers prime?

(Could use FACT button on
calculator)

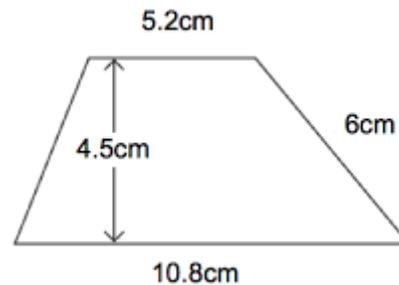
a) 51 No

b) 127 Yes

I bought a scarf in the sale.
It was marked as 30% off. It
cost me £10.50. What was
the original price?

£15

Work out the area of the
trapezium.



36cm²

Use your calculator
to work out
 $6.12 \times 10^7 \div 4.8 \times 10^2$.
Answer in standard form.

1.275 × 10⁵

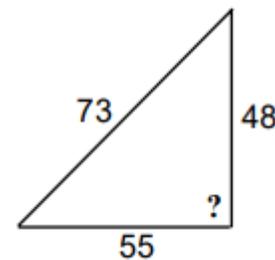
Find the gradient of the
line joining (-3,5) and
(7,10).

$\frac{1}{2}$

What's the exterior angle of
a regular decagon?

36°

Is this triangle right angled?



Yes

y is inversely proportional
to x . Given that $y = 12$
when $x = 4$, find the value
of y when $x = 16$.

$y = 3$

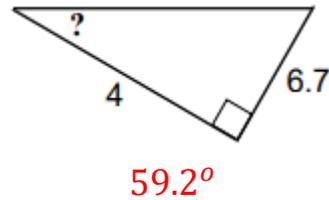
I buy a car for £15,670. The car depreciates at a rate of 23% per annum.

a) How much is the car worth in 5 years?
£4241.53

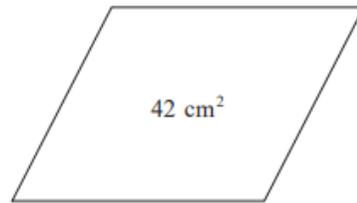
b) How many years until the car is worth less than £1000?
11 years

An equilateral triangle with side length 24cm has the same perimeter as a square. What's the area of the square?
 324cm^2

Find the marked angle.



This parallelogram has an area of 42cm^2 .



The parallelogram is enlarged with a scale factor of 5. Calculate the area of the enlarged parallelogram.

1050cm^2

I have five red socks and six green socks in a drawer. I pick two socks at random. What's the probability both socks are the same colour?

$\frac{5}{11}$

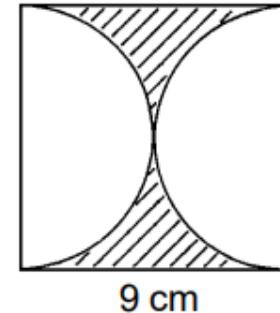
What's longer, 1500 metres or 1 mile?
1 mile
(1500m = 0.9375 miles)

Use the conversion
 $8\text{ km} = 5\text{ miles}$.

Find two consecutive numbers which, when multiplied together, make 462.

21×22

The picture shows a square and two semicircles. Find the shaded area.

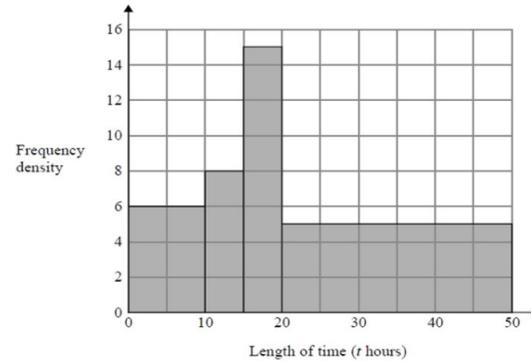


17.4cm^2

Solve $x^2 + 8x - 3 = 0$.
Give your answers to 2 decimal places.

$x = 0.36$ or $x = -8.36$

The histogram shows the amount of time a group of people spent watching TV last week. Estimate the percentage of people who watched TV for more than 40 hours. $\frac{50}{325} = 15\%$



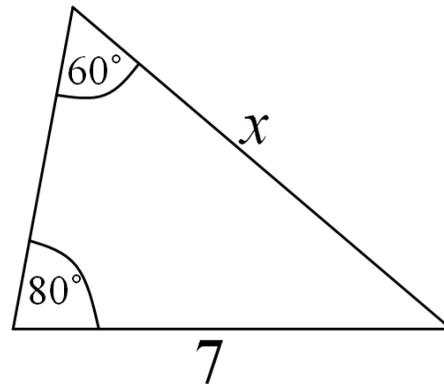
Find the coordinates of the turning point of the graph $y = 10x - x^2$.

$(5, 25)$

In a sample, 6 earthworms measure between 40mm and 60mm. 10 earthworms measure between 60mm and 120mm. Estimate the mean length.

75mm

Work out x .



7.96

Show, by shading on the grid below, the region defined by $y \leq x + 2$. Label your region **R**.

